

## THE PAST, PRESENT AND FUTURE OF THE ARAL SEA

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Catastrophic fall on 17 meters of the Aral sea level and desiccation of extensive areas of its bottom, accompanying by powerful wind transportation of salt and dust, repeatedly occurred in the recent geological past. These processes frequently were more strong than the modern one, radically changing relief and nature of ?uran. But compared with the ecological accidents, modern one was caused by the human activity. The deflation basin of the Aral sea has arisen about 2mln years ago. Originally the hollow of Aral was considerably bigger to compare with existing now (depth was 150-200 m) and was produced by deflation. Volume of salt and dust withdrawal from it constituted about 15000??3.

After the Aral hollow origination it was repeatedly flooded and filled with sediments by the end of akchagil and quaternary period. Sediments thickness is 60-120?. The periods of flood of the hollow alternated with partial or complete desiccation. At that time galogenes and eolic processes predominated over the area.

Analysis of the Aral previous history does not leave hope for the best future. For last three decades it has dried up by the half. In XXI century the sea will disappear. Billions tons of salts, which will settle from evaporated sea water, and hundreds cubic kilometers of friable sediments filling the hollow, will be picked up by storms and transported to the south.

Further powerful salt and dust transportation will draw back the hollow to its original conditions and make of it huge deflation bowl. The negative consequences of this process already influence nature and population of the Aral sea adjacent areas.