



# To Prevent Floods, a Method and Device for Deepening the Bottom of Rivers have been Developed

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## Opinion

Volume 9 Issue 1

Received Date: January 13, 2025

Published Date: January 20, 2025

DOI: 10.23880/jenr-16000404

## Keywords

Rivers; Electricity; Floods

## Opinion

The technical solution relates to the means of deepening the bottom of rivers and other water bodies. Continuously increasing destructive floods in quantity and volume from rivers overflowing their banks in all countries of all continents require a revision of the attitude of mankind to rivers. These attitudes are known for their absolute indifference, except for the extraction of electricity from the waters of blocked channels to rotate the turbines of electric generators. Some enterprises, concerned about coastal floods, buy or rent dredgers and deepen the bottom by several meters. More well-known measures to reduce floods and their destructiveness are the construction of walls - river banks and the construction of dams. This allows to slightly reduce the destructiveness of floods. But not for long. The depth of rivers is decreasing, constantly and inevitably. In order to eliminate floods, it is necessary to maintain the profile unchanged, and more specifically the depth of the river along its entire length, so that all the waters in the spring and after heavy rains could not overflow the banks. This requires regular cleaning or prevention of sediments. Modern serial dredgers can deepen the river bottom, but require significant effort. To do this, they deepen the bottom several meters deep and pollute the coastal areas. In this case, considerable rivers of fuel are consumed, and continuous monitoring and control of all processes is necessary. And the dug ditches and pits silt up very quickly and the rise of the river bottom continues along the entire length of the river. Floods continue during subsequent high waters. This technology requires a floating craft, considerable displacement, capable

of carrying such actuators as propellers, anchor devices, bottom sediment activators, pumps, pipelines. And all these units and mechanisms must be provided with electric or hydraulic drives with powerful energy. This requires an appropriate powerful power plant and continuous control. The power plants of serial dredgers, now in the range from 100 to 1000 kW, require a lot of fuel, lubricants, time, and continuous control and maintenance. The total cost of such equipment is hundreds and thousands of dollars.

It is necessary to simply prevent the shallowing of rivers. Or remove what has settled recently along the entire length of the river.

A technical solution has been developed - a new method of preventing floods, which can remove a small layer of the bottom along the entire length of the river at a cost that is orders of magnitude less than serial machines.

Offered to the enterprise that can implement and become a co-author and leader of the new technology of dredging and anchoring of floating craft.

Implementation of innovations is such a complex process that the author alone is not able to manufacture a prototype, conduct a full range of tests and create production of new products. Here, a team of authors interested in the final result is needed. I propose to create such a team that can master and launch a line of new dredging equipment for flood prevention. The formula and description of the invention are ready. If such a company is found, then together we will decide how to formalize the invention: in the form of a patent or Know-How.

