**Loss of small rivers across the steppe: climate change or the hand of man? Case study of the Chaplynka river**

[Iryna Chushkina](https://www.tandfonline.com/author/Chushkina%2C%2BIryna), [Hennadii Hapich](https://www.tandfonline.com/author/Hapich%2C%2BHennadii), [Olena Matukhno](https://www.tandfonline.com/author/Matukhno%2C%2BOlena), [Artem Pavlychenko](https://www.tandfonline.com/author/Pavlychenko%2C%2BArtem), [Volodymyr Kovalenko](https://www.tandfonline.com/author/Kovalenko%2C%2BVolodymyr) & [Yevheniia Sherstiuk](https://www.tandfonline.com/author/Sherstiuk%2C%2BYevheniia)

Innumerable small steppe rivers have been degraded and lost through the construction of dikes and dams, as well as changing regional hydrology. A failed restoration project involving mechanical clearance of the channel of the small river Chaplynka is investigated. Field and laboratory studies included sampling and analysis of water and silt deposits. Muller’s Іgeo class, categorising the technogenic load on the water ecosystem, and a bottom accumulation coefficient illustrate the degradation of the catchment and the absence of hydraulic connection along the erstwhile river channel. The river flow has not returned. The most obvious shortcoming of the riverbed clearing operations was the dumping of the dredged material on the riverbank, from where it was washed back into the channel. Moreover, excavation of the channel drained shallow aquifers that are no longer replenished by depleted precipitation and infiltration.

**KEYWORDS: small river, catchment, restoration, bottom deposits.**