

# **Water security consequences of the Russia-Ukraine war and the post-war outlook**

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Russian forces have destroyed one-third of Ukraine's freshwater storage since February 2022 to 2024. Potable, industrial and irrigation water supplies have been cut across the south and east of the country. Overall, social, economic and ecological damages are estimated in the tens of billions of \$US, while the loss of Ukraine's economic potential and necessary investments in restoration reach \$600 billion. We consider the current eco-economic efficiency of irrigated crops, as well as damage to commercial and recreational fisheries including losses of littoral areas and spawning grounds. Alternative water supplies for the war-torn regions by construction of wells to tap groundwater are presented and justified; various scientific opinions and approaches to ecosystem management and options for the future reconstruction of the Kakhovka Reservoir are discussed; and, finally, strategic development options for the water sector are considered to ensure water security in the post-war development period.