

RELEVANT ISSUES OF LEGAL AND REGULATORY AND TECHNOLOGICAL SUPPORT OF CADASTRAL WORKS FOR DETERMINING FLOODING AND UNDERFLOODING ZONE BOUNDARIES FOR THE PROTECTION OF REAL ESTATE OBJECTS IN EMERGENCIES

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Since 2014 the Russian Federation has been carrying out the works for determining flooding and underflooding zones near water objects. It is legally stated that the information about the boundaries of such zones must be inserted into the Unified State Real Estate Register. However, the range of legal and regulatory and technological issues in determining the boundaries of flooding zones has not yet been solved and the works have not been completed to the full extent. The article performs the analysis of governing regulatory documents as well as the amendments accepted in 2019, devoted to the improvement of the procedure for determining flooding and underflooding zones. As the argument of relevance of determining flooding and underflooding zones were considered the examples of catastrophic floods on the territory of the Russian Federation, which caused billion-ruble losses to the state as well as to the real estate owners. The article substantiates the necessity of computer-based forecasting modeling of emergencies, related to flooding of territories and determining the boundaries of the emergency geospace – the flooding and underflooding zones. The article draws the technological scheme of the actions for determining emergency geospace. There have been built the digital forecasting models of the flooding zones on the territory of the Novosibirsk city in disastrous flood. There has been drawn the information about the registered geodata base of flooding zones in residential areas of the Novosibirsk region during seasonal river floods. To optimize the processes of entering information about flooding and underflooding zones into the unified state register of real estate, a technological scheme for establishing flooding and flooding zones has been developed and introduced into the work of the Verhne-Obskoj Basin Water Management. There has been shown the positive impact of determination and registration in state informational resource of the data about flooding and underflooding zone boundaries. In particular this information allows to perform the evaluation of territorial stability of land-property complex spatial structures. On the basis of statistical data on damage due to floods, there has been drawn the conclusion about the necessity of tax reduction on real estate in areas of possible emergencies and redistribution of funds of real estate owners for property insurance.

Keywords: real estate objects, land-property complexes, geoinformational systems, cadastral works, flooding zones, underflooding zones, hydraulic structure, underflood probability, emergency, urban development, territorial management, population protection

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