The article outlines the problems of functioning of the water management complex in Ukraine. The problems of water use in Ukraine and CIS member states and the use of transboundary water resources within the framework of the CIS are investigated. The institutional prerequisites of innovation and technological modernization of the water management complex of Ukraine are determined. The international experience of water use management is considered and a complex of priority measures for streamlining of water use is formed on the regional and national level. The creation of the Bank for Development of Ukraine, national and regional innovation development funds, the creation of the Innovation Code of Ukraine, as well as mechanisms with a special regime of innovation and investment activity were proposed.