The paper presents an assessment of the technical condition of the weir constructions (culvert-weirs and weirs) located in the sub-irrigation system Solec. The analysis was made in terms of the possibility of reconstruction and modernization of the sub-irrigation system for increasing of water retention in surroundings areas. The study included some parameters of weir constructions such as: the size of the soil cover of underground pipelines of culvert-weirs, their state of sediment deposits, the position of the abutments in relation to the soil surface and the state of guides and rising elements. Also the impact of conservation works or lack them on selected technical parameters was analysed. This study was based on recommended methods of measurement, together with the applicable criteria for assessing the technical condition of selected technical parameters. At present, none of the analysed weir constructions can not accumulate and block the water outlet on the considered area of peat-moors soils.