

Aleš Verbnik:

UPRAVLJANJE MALIH UMETNIH VODNIH TELES

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Povzetek

Prikazana je problematika malih umetnih vodnih teles. Najprej je pregledana zakonodaja, ki je v veljavi. Analizira se termin malo umetno vodno telo, ki naj bi bil prilagojen glede na slovenske razmere in naštete naloge, ki jih ima upravljavec. Natančneje so opisane različne vrste spremljanja stanja ter monitoring vodne bilance kot del nalog, ki jih ima upravljavec. Zato so prikazane metode za spremeljanje pretoka ter načini določanja padavinskega dotoka v malo vodno telo. V drugem delu sta predstavljeni dva primera malih umetnih vodnih teles na področju mesta Ljubljana. Pri obeh primerih je prikazano zdajšnje stanje in narejene analize vodne bilance. Zadrževalni čas vodnih teles je upoštevan kot eden glavnih pokazateljev stanja, zato je prikazano, kako z meritvami oz. s spremeljanjem elementov vodne bilance lahko vplivamo nanj. Ker na malih vodnih telesih praviloma ni meritev, so podani predlogi za izgradnjo primernega objekta za merjenje iztoka. Opisani pa so tudi predlogi za izboljšanje razmer, to je za izboljšanje zadrževalnega časa. Predlagane meritve služijo tudi za spremeljanje uspešnosti ukrepov, za spremeljanje sprememb v zaledju in podobno.

Ključne besede: upravljanje z vodami, malo vodno telo, vodna bilanca, meritev pretokov

Abstract

My diploma assignment deals with problems of small-build water objects. In first part of my assignment we analysed the legislation concerning these field of science in Slovenia and we also determine the subject of artificial small water body adapted to specific Slovene conditions. Enumerated are the assignments of the manager and also described more specific different types of situation changes and monitoring of water balance as a part of managers assignments. That is why the methods for changing the outflow and different ways of determining the rainfall-inflow into the small-built water objects are shown. In the second part of my assignment there are two representations of artificial small water bodies on the territory of city Ljubljana. The current condition of artificial small water body and also analysis of water balance are shown in both cases. Residence time is regarded as one of the key pointers of current status and there is also shown how we can influence it by measurements or by changing the elements of water balance. Because we usually do not have measurements on small water bodies, suggestions for building suitable outflow-measuring objects are shown in both representations. Described are also suggestions for improving the conditions such as improving the residence time. Suggested measurements serve us also for analysing how successful our actions have been, for analysing changes in background and similar.

Key words: water management, small water body, water balance, discharge measurement