

LETTER TO THE EDITOR

Comment on “Common Failures of the Natural Wastewater Treatment Systems (Constructed Wetlands) of Kayseri, Turkey”

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Their article considers that all waste should be disposed of before being disposed of and discharged, thus creating a healthy and clean environment. The TLAND designed in this article is also defined as a natural treatment system, which simulates the natural wetland system. They are usually used for the treatment of specially designed domestic and industrial wastewater. In this article, the improper design and possible failure of constructed wetlands were investigated, and the causes of the failure and possible corrective measures were put forward.

In their article, the on-site visit and investigation of all the natural treatment systems of the Kayseri Province of Central Turkey were performed. And then, the possible failures were analyzed. The most common failures contains the improper design, construction and site selection, ponding, insufficient plantation, leakage through slopes and lack of post-construction operation, monitoring, and maintenance activities.

Table 1 provides a list of villages together with population and date of construction in the constructed wetlands of Kayser. We need to determine whether the data is consistent with actual state.

Town	Village	Pop.	Date Con.	Town	Village	Pop.	Date Con.	
Akılla	Gümüüşu	82	2007	Pınarbaşı	Gebelek	87	2008	
	Bünyan	101	2007		Olukkaya	176	2007	
Develi	Yünören	589	2008		Pañlı	209	2007	
	Ayşepınar	1064	2007		Y.Borandere	950	2008	
	Caylıca	820	2011		Melikgazi	24	2009	
	Çöten	698	2009		Hilmiye	131	2010	
	Epece	924	2006		Arslanbeyli	525	2010	
	Oksüt	630	2008		Çördüküti	288	2010	
Felahiye	Tombak	244	2008		Esenköy	351	2010	
	B.Künye	331	2010		Solaklar	276	2010	
	Çomaklı	913	2010		Kaman+Han	538	2010	
	Kabaklı	644	2010		Sarız	Kemer	219	2007
	Kepic	212	2007		Kıskaçlı	131	2007	
	Kuruöyük	363	2010			M.Hüseyinler	150	2008
İncesu	Şeyhşaban	358	2007		B.Söbecimen	494	2009	
	Subaşı	348	2010		Davulçuk	202	2010	
Kocasinan	Elmalı	158	2007	Sarıoğlan	Keklikoğlu	159	2007	
	Y. Hasanlı	76	2009		Üzerlik	457	2009	
	Eskiömerler	292	2010		Tomarza	Çanakpınar	307	2007
Talas	Karakimse	386	2010		Gülveren	243	2007	
	Alaybeyli	975	2007		Kale	267	2009	
	Yamaçlı	314	2008		Arslantaş	352	2010	
	Çömmekçi	915	2009		Çiçin	628	2010	
Yeşilhisar	Süleymanlı	615	2010	Yahyalı	Kapıkaya	419	2010	
	Doğanlı	359	2010		Karaköy	1142	2008	
	Araplı	154	2009					

Table 1 Constructed wetlands of Kayser.

But, among the constructed wetlands, only a couple of them are operating partially. The rest has turned into the weed invasion. We should take some measures to repair these systems. In our method, the initial step to be taken is to revise the typeprojects by taking international and national standards and requirements for the similar regions into consideration. Contractors responsible for construction of natural treatments systems should be closely inspected at every stage of the construction works. The systems should be handed over in a fully operating state. A proper operation, monitoring, and maintenance program should be developed and implemented accordingly.

Natural treatment systems are state-funded projects. If urgent measures are not taken with regard to common failures observed in natural treatment systems, these systems are turning and will continue to turn into wasted investments. The project is supported by relevant research departments. It provides help and reference for future research on environmental protection related aspects.