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The urgent usage of urban treated wastewater for sustainable development of Mashhad

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The population growth during these two recent decades and other where development of public health in Mashhad, has not only increased using fresh water but also involved the volume of urban wastewater has been generated. The annual use of fresh water in Mashhad is estimated about 200 millions of cubic meters. In summary of approximately 70% of the volume of producing wastewater will specify that a considerable volume of recyclable water may available. Entire urban wastewater to environment leads to environmental pollutions which includes deterioration of surface and under ground water sources, soil pollution and threatening of public health. Use of urban treated wastewater has become a protection of environment and also reuse of these renewable water resources, reducing the demands of fresh water, cutting down pollution of surface and under ground water and will develop the crop yields. The use of treated wastewater in cities which struggling to balance water use among municipal and agricultural users are more important. Because, recycled wastewater contains different levels of dissolved solids, nutrients (N, P, K) and the other elements. so that developing soil fertilization, decreased consumption of chemical fertilizers and standing low input agroecosystems. Recycled urban treated wastewater leading sustainable development of Mashhad by: 1-Increase fresh water resources by replacing of the urban treated wastewater with fresh water which is used for farms irrigation. 2-Developing of public health through mitigation pollution of drink water in Mashhad 3- Recharge the aquifers 4- Providing irrigation of Mashhad greenbelt and urban landscapes.

Keyword: Urban waste water, Treated waste water, Mashhad, Sustainable development, Drink water

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