



University Of Zabol
Graduate School
Faculty Of Water and Soil
Department Of Water and Soil Engineering
The Thesis Submitted for M,S.C Degree
(In The Field Of Desertification)

**Assessment of changes in groundwater quality and quantity
of Jiroft plain (Case Study block area)**

Supervisor:
Dr. Mohammad Nohtani
Dr. Mohammad Reza Dehmardeh Ghaleno

Advisor:
Dr. Ali Jan Abkar
Ms. Abbas Khaksfidi

By:
Sadollah Soleimani Damane

Winter 2019

Abstract

Iran is among the countries in the arid regions of the world, so water can be said to be one of the most important limiting factors in industrial and economic development. Operation of aquifer for various uses and proper management of groundwater consumption requires accurate information on the quantity and quality of water. Reducing the water table and its excessive harvest have not caused a near blue harvest, and on the other hand, because of the salinity and the presence of various salts in the existing water due to the loss of water resources, the water can be provided through this way. will not be. A total of 30 underground water samples were analyzed by Jiroft Aquifer Hydrochemical. The salinity parameters (EC), acidity (PH), total soluble salts in water TDS, water temperature, number of cations and anions in water based on hot water measured Became In this research, underground waters of Jiroft plain (Block area) were classified for drinking using Shouler diagrams. In order to divide the waters of this plain (block) into agricultural-industrial uses Wilcox charts were used. A study on the use of public participation methods is designed to control infection and nutrition and optimal utilization of surface water. Various factors contribute to determining the quality of groundwater. Investigating the recognition of these factors has a positive role in the management of groundwater resources. Alluvial beds of the plain along with the evapotranspiration causes the formation of salt slabs that have a large amount of salts in the Taj Abad and Zainabad Zaraki villages in underground water resources. The relative concentrations of chlorine and sodium ions are affected by the cationic exchange. Calcium also enters the underground waters of the plain from the dissolution of carbonate metamorphic rocks. Due to the presence of rocky moss, which is the origin of sedimentary thistle, the main factor is magnesium in the region.

Key words:Underground water, changes in water quality and quantity, plain Jiroft.