### **Abstract:**

Land use planning is the first step on the surface geomorphologic Zoning determine the geomorphologic characteristics is the homogeneous surface. Zoning homogeneous geomorphologic point of view, can be managed in the same way. Zoning ground, terrain detection Ups and downs basic properties such as surface elevation, slope and aspect focuses on the study of the basic models discussed by use Zoning quantitative groun The basic models of the structures are said. Which has a specific shape such as spherical, linear or step have Factors associated with the change in the overall shape and retain its curvature and slope in different directions change only stopped. The reason for choosing this model is that the predictable properties form the direction of water movement, erosion potential providers, reducing or increasing the flow of water has the capability collection with the models the stem consists of linear models, Circle and divergent sets the dimensions of the basic models in MATLAB windows nine ranked two degree fitted to the surface and to determine the fit this parameter models the sum of squared differences is used. In addition by use Phase Logic for spreading the suitability of the study area was found in five different classes the most suitable areas for feeding downstream downstream cone Fans and lowland areas such classes are the very poor.

Key words: Spreading, Zoning bit, Grbaygan, Basic model, Phase logic.



# University of Zabol Graduate school Faculty of Water and Soil Department of Water Engineering The Thesis Submitted for the Degree of Master of Science (in the field of Water Resource Engineering)

Quantitative Land Surface Segmentation By Elementary Forms(Case study: Optimal positioning for flood spreading in Grbaygan catchment)

# **Supervisor**:

Dr. M. Nohtani

### **Advisors**:

Dr. H. Sadeghi Mazidi

By:

Sedighe Ebrahimiyan

# October 2013