ridges. It lies between latitudes 30Á 40ô to 30Á 50ô and longitudes 29Á 50ô to 30Á02ôand ocd

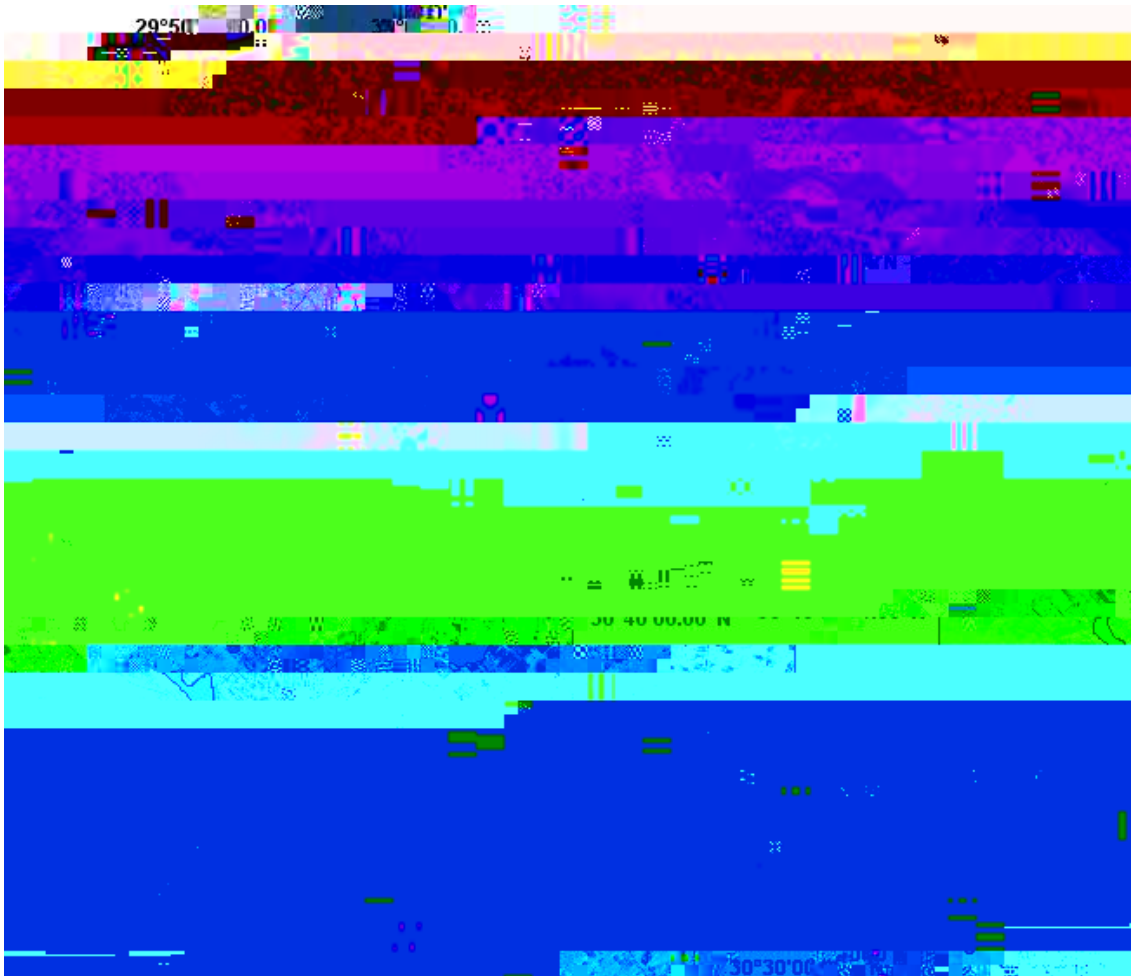


Fig. 4. Visual classification of water logged areas from 1984 to1999.

3.2. Soil Chemical Analysis

Thirty soil samples were collected during drilling of the studied piezometers to determine the basic soil characteristics as given in Table 2.

3.2.1. Soil salinity

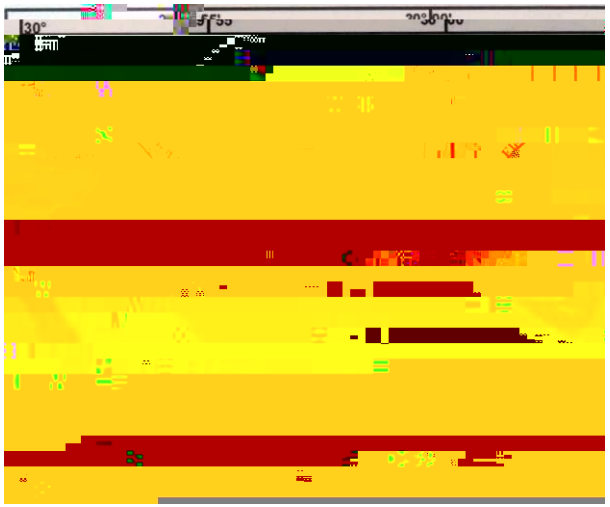
3.2.2. Soil pH values

between 7.61 to 8.52. The calcareous nature of the study area may contribute in such high pH values, whereas no clear relationship was rec0 G was d sose ihhe s cl sucn

3.3. Application of Geographic Information System (GIS)

Fig. 6. Infiltration rate map of the study area

Fig.7. Hydraulic conductivity of saturated zone map.



July 2003

Table 4. Characteristics of the area covering priority classes for drainage management (Scenario 2).

Priority Class	Layer Weight	Drainage conditions	Location	Area (feddan)	Area %	Type of irrigation	Type of

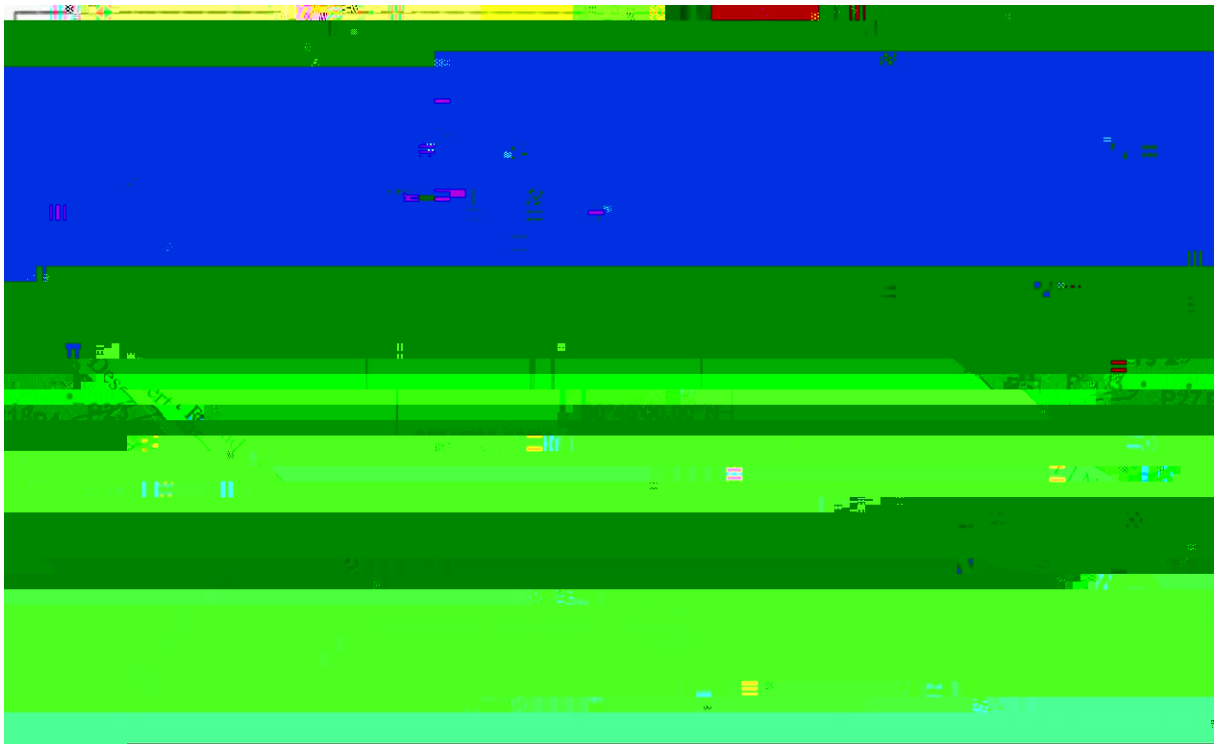


Fig. 15. Priority classes for drainage management (Scenario 2).

REFERENCES

El Ghazawi, M.M. (1982). ***ñ***Geological studies of the Quaternary-Neogene