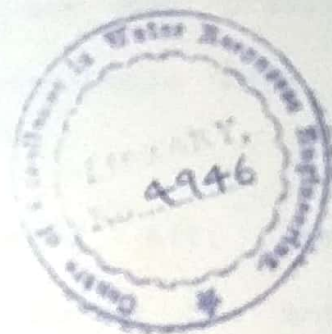


DETERMINATION OF EXTENT OF SALT WATER
INTRUSION IN BELA PLAIN BY USING
ANALYTICAL TECHNIQUES

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A
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ABSTRACT

The present study was conducted to determine the interface position with the help of available analytical techniques. The theoretical values are not valid for the study area where the sedimentary deposits are not homogeneous or isotropic, commonly assumed for such solutions. Zones of fresh and salt water are stratified ; and a maximum chloride value occurs nearer to the surface indicating salt water intrusion in the upper layers. The lower layers due to their low permeability appears to be resisting the inland encroachment of sea water.

The extent of intrusion is also found to be related to the rate of ground water outflow from the aquifer to the sea, which in itself is a function of the gradients and permeability of the aquifer.

The non-availability of relevant data near the coast was one of major handicaps found in the study. Further field investigations are proposed to improve/verify the findings of the report.