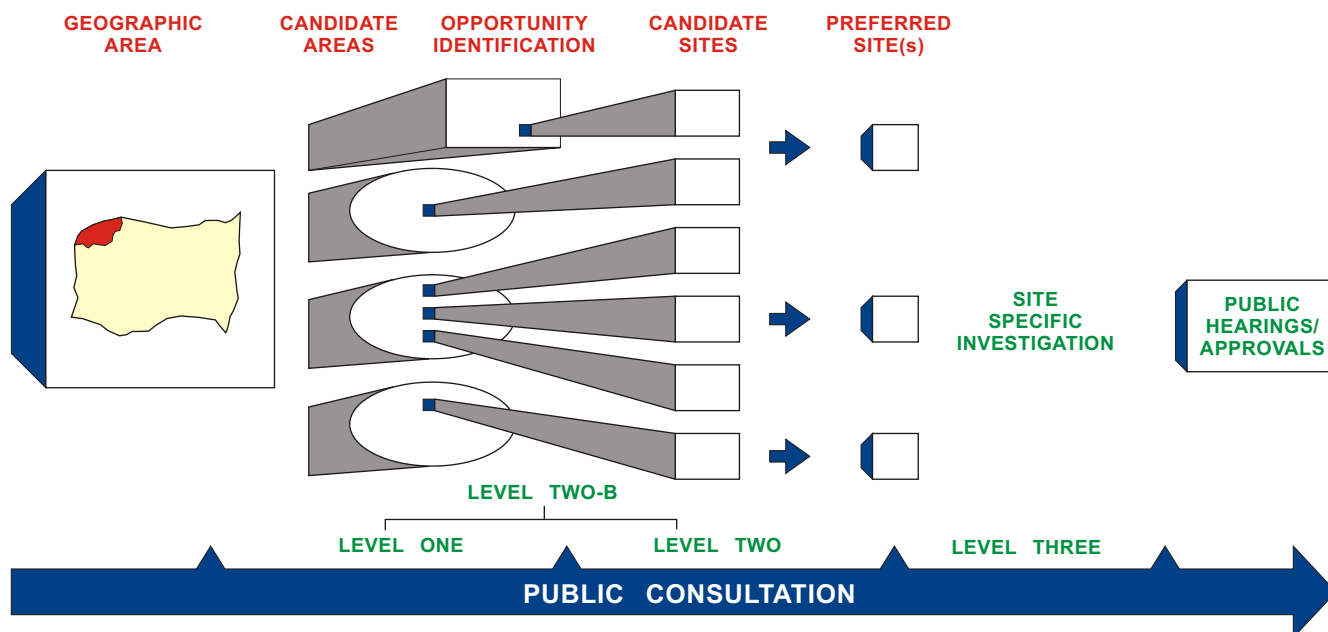


LANDFILL SITE SELECTION



PROBLEM

In 1985, the County of Essex and the City of Windsor initiated the Essex-Windsor Solid Waste Management Master Plan study. As part of this study, a landfill search was undertaken to locate and to verify suitable lands on which to establish one or more landfill sites. This site was required to serve and expanding population over 25 years, and would constitute about 100 ha of which 80 ha would comprise refuse. Hydrogeology was one of the disciplines that provided input to the search.

APPROACH

The landfill search involved the following levels.

Level One -

Identification of Candidate Landfill Areas: *A hydrogeologic inventory map of the County was prepared.*

Level Two and Two B -

Identification of Candidate Landfill Sites: *Office evaluation of candidate areas and long list sites.*

Level Three -

Identification of the Preferred Landfill Site(s): *Office and field studies to comparatively rank the seven short-listed sites.*

SOLUTION

Based on the consideration of the various technical disciplines, the preferred site selected was an expansion of the existing Essex County Landfill No. 1. This existing site comprised about 19 ha of refuse up to 10 m in thickness. The proposed landfill area is about 124 ha, of which 65 ha will contain refuse with a maximum thickness of 35 m. The site was subsequently subjected to a detailed hydrogeologic study as part of the environmental protection assessment. In 1995, the site was approved without a hearing and a Provisional Certificate of Approval issued.