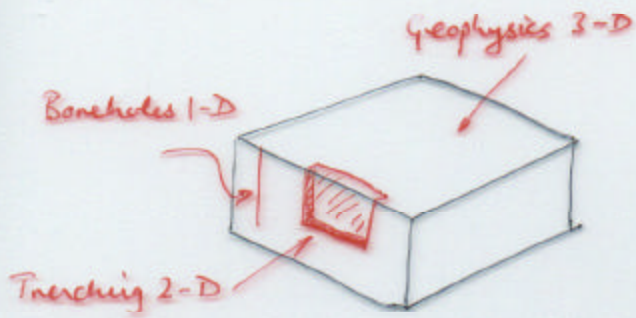


GEOPHYSICAL METHODS OF INVESTIGATION



Investigation Scales

small scale - representativeness of sample
- large scale structures
v. trap for groundwater since large scale structure controls flow/transport behavior.
- use of pump tests.

large scale -
- big picture
- correlation with real behavior through boreholes.

Geophysical Methods:

Fast/large volume/area coverage → inexpensive.

1. Geomagnetic methods
2. Geoelectric methods
 - 2.1 Direct Current
 - 2.2 Electromagnetic (Radar)
3. Seismic methods
 - 3.1 Refraction
 - 3.2 Reflection
4. Gravity methods

Miscellaneous: well logging.

DIAGRAM OF DELIVERABLES FOR A PHASE II MONITORING WELL DESIGN PROJECT

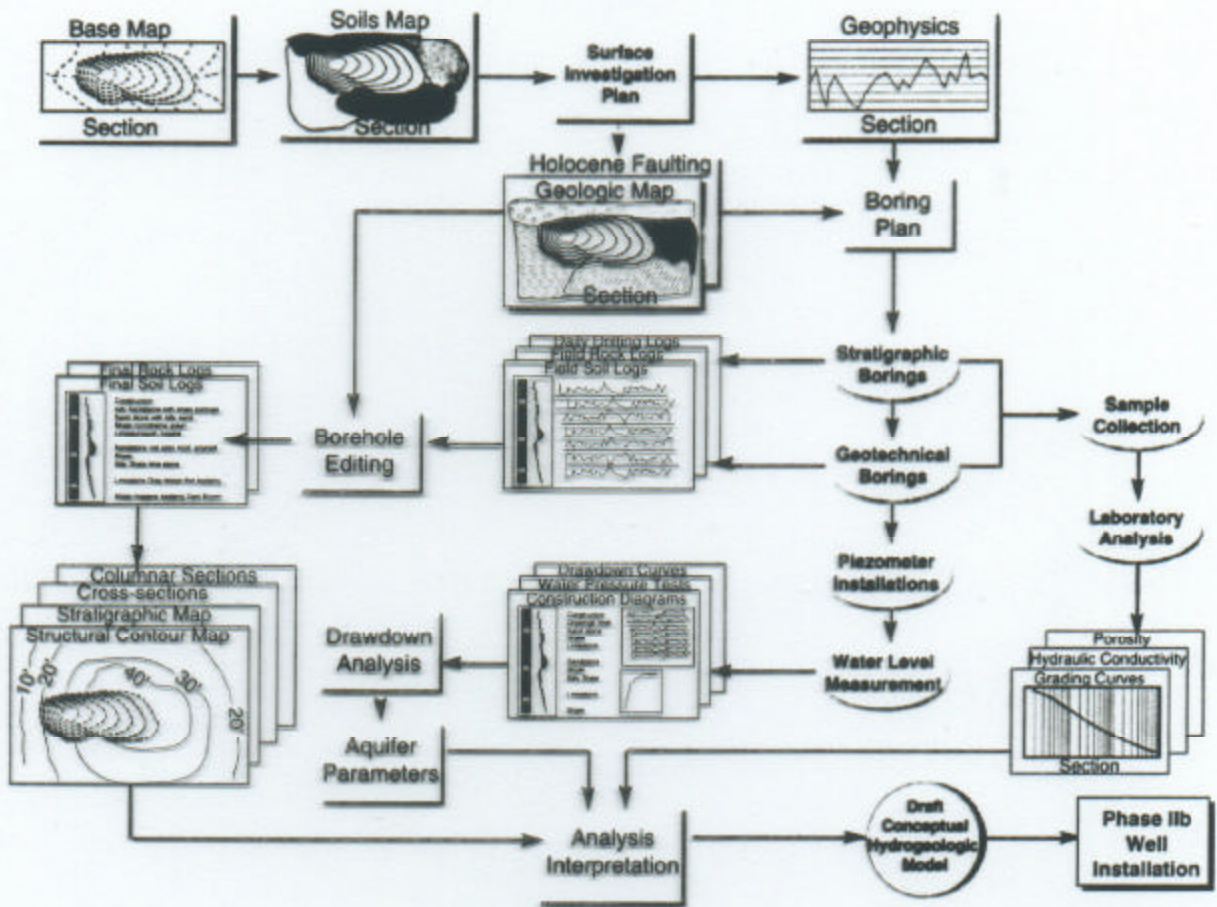
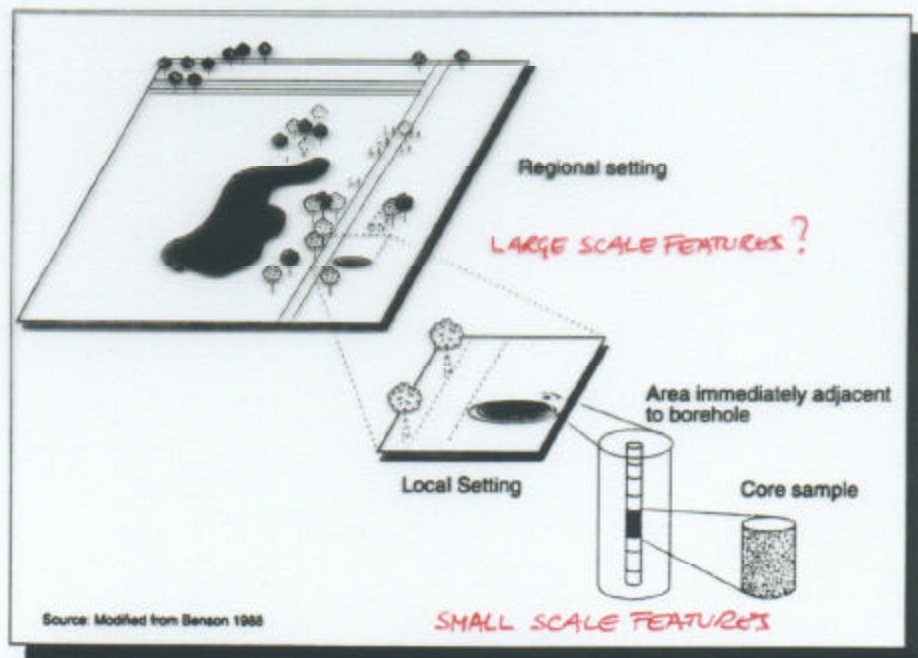


Figure 3-3a Phase II Flow Diagram

CONCEPTS OF SCALE



Source: Modified from Benson 1988

Figure 3-12 Regional to Core Sample Scales