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Solving Geo-Environmental Problems and Local Government Institute: Example of Chiba Prefecture government

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The research institute of local government dealing with the geological environment survey studies the geology affecting the citizen life directly. Because the phenomenon about environmental geology is related to the regional geological properties, it is necessary to understand the local geologic characteristic for the solution to the problem.

Geological constitution is different on each area in the Japanese Islands. The problems in the use of the geological environment (land use, groundwater use, etc.) is different for every Group constituting Boso Peninsula are as follows.

Man-made strata: Subsidence and liquefaction - fluidization damage by the strong earthquake.

Holocene formation: subsidence, geo-pollution (groundwater pollution, ground air pollution and strata pollution) and ground failure by strong shaking of the earthquake.

Shimosu Group: geo-pollution, the groundwater drying up and slope failure.

Kazusa Group: subsidence, geo-pollution, the groundwater drying up, spouting out the methane gas and slope failure.

Various geological problems are submitted to our institute by cities, towns and villages and the prefecture government. To find a solution to the problem, the government officers and our institute staff survey the damaged site and decide on a method for the mechanism elucidation of the problem in the field. The member examines the proposed method for the solution to the problem and pushes forward a solution to the problem step by step.

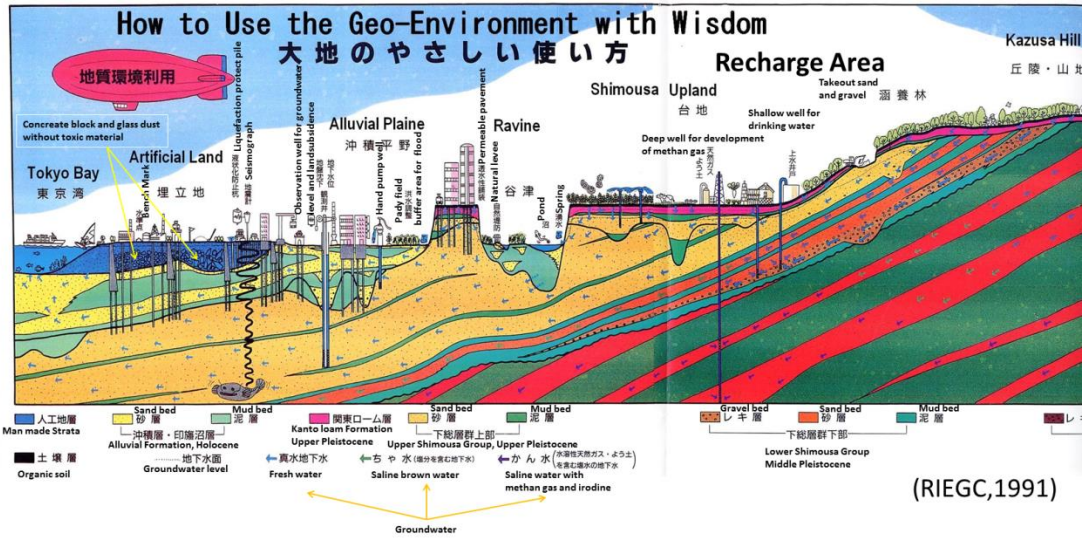


Figure 1: Concept geological cross section on east-west direction and groundwater flow [1]

References:

[1] Research Institute of Environmental Geology, Chiba (1990) In: Pamphlet *How to use the Geo-environment with wisdom*. Research Institute of Environmental Geology, Chiba.

