

HYDROGEOLOGICAL CROSS SECTION

OF UPPER PLATEAU OF THE NILGIRIS

SPRINGS

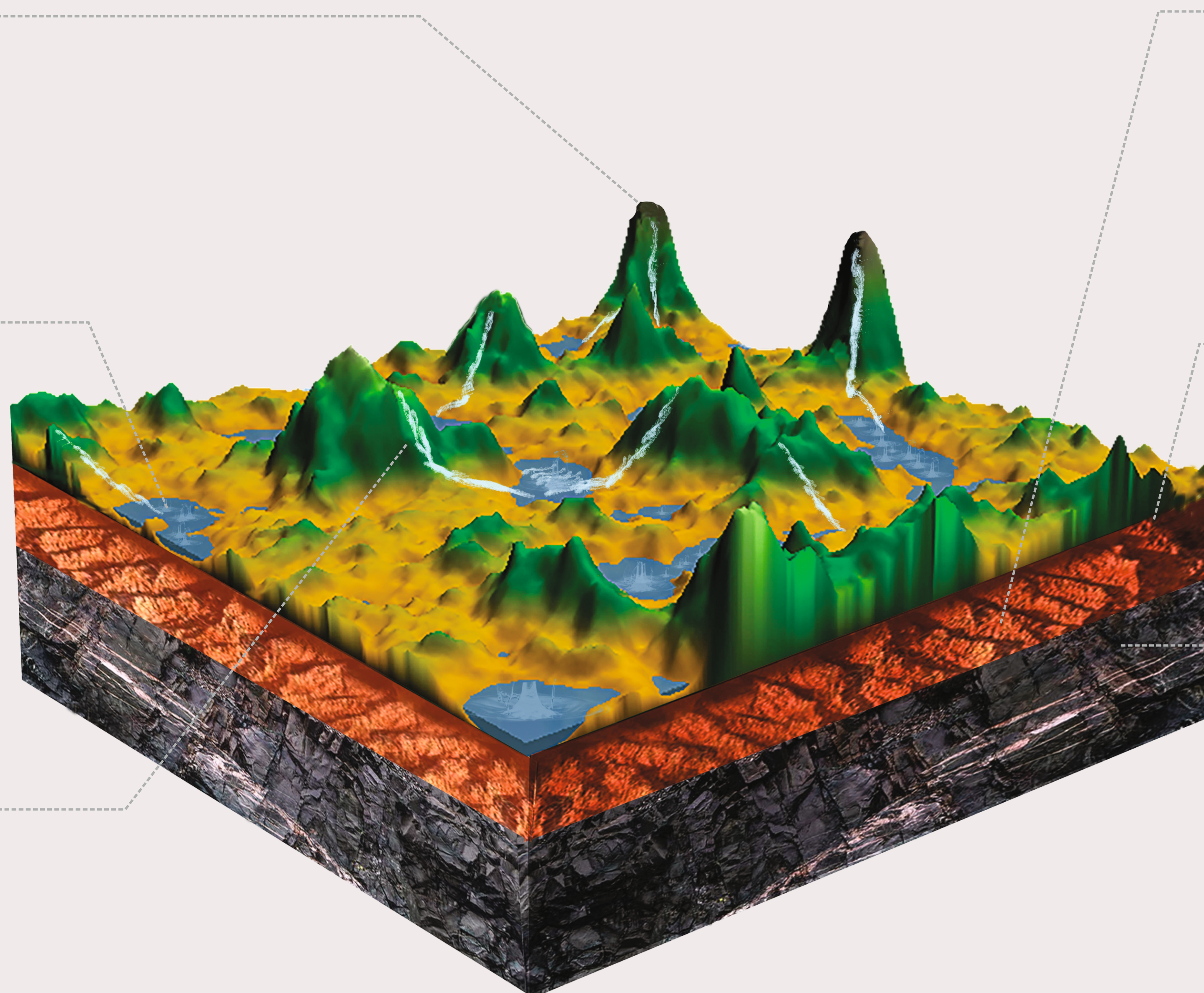
Springs are indicated by locations or points on the ground, where water from beneath the ground emerges onto the surface. A spring may be considered as an ‘overflowing aquifer’. Springs represent ‘natural groundwater discharge’ that feeds streams and rivers, often making such streams and rivers perennial.

WETLAND

A wetland is a land area that is saturated with water, either permanently or seasonally, such that it takes on the characteristics of a distinct ecosystem. The primary factor that distinguishes wetlands from other land forms or water bodies is the characteristic vegetation of aquatic plants adapted to the unique hydric soil. Wetlands play a number of roles in the environment, principally water purification, flood control, carbon sink and shoreline stability. Wetlands are also considered the most biologically diverse of all ecosystems, serving as home to a wide range of plant and animal life. The main wetland types include swamps, marshes, bogs, and fens.

STREAM

A stream is a body of water with surface water flowing within the bed and banks of a channel. Depending on the groundwater level in an aquifer, the stream may be fed by groundwater or may be recharging the aquifer. Depending on its location or certain characteristics, a stream may be referred to by a variety of local or regional names.



CHARNOKITE/GRANITIC GNEISS (WEATHERED)

Gneiss is a common distributed type of rock formed by high-grade regional metamorphic processes from pre-existing formations that were originally either igneous or sedimentary rocks. It is often foliated (composed of layers of sheet-like planar structures). The foliations are characterized by alternating darker and lighter coloured bands, called "gneissic banding" because the rock glitters.

LATERITE SOIL

Laterite is a soil and rock type rich in iron and aluminium, and is commonly considered to have formed in hot and wet tropical areas. Nearly all laterite are of rusty-red colouration, because of high iron oxide content. They develop by intensive and long-lasting weathering of the underlying parent rock.

CHARNOKITE/GRANITIC GNEISS (HARD COMPACT)

All charnockites were once thought to be igneous, but it is now recognized that many are metamorphic., because, despite the high temperatures and pressures, the original rock never actually melted. In India they form the Nilgiri Hills, the Shevaroy, the Biligirirangan Hills and part of the Western Ghats, extending southward to Kanyakumari.

