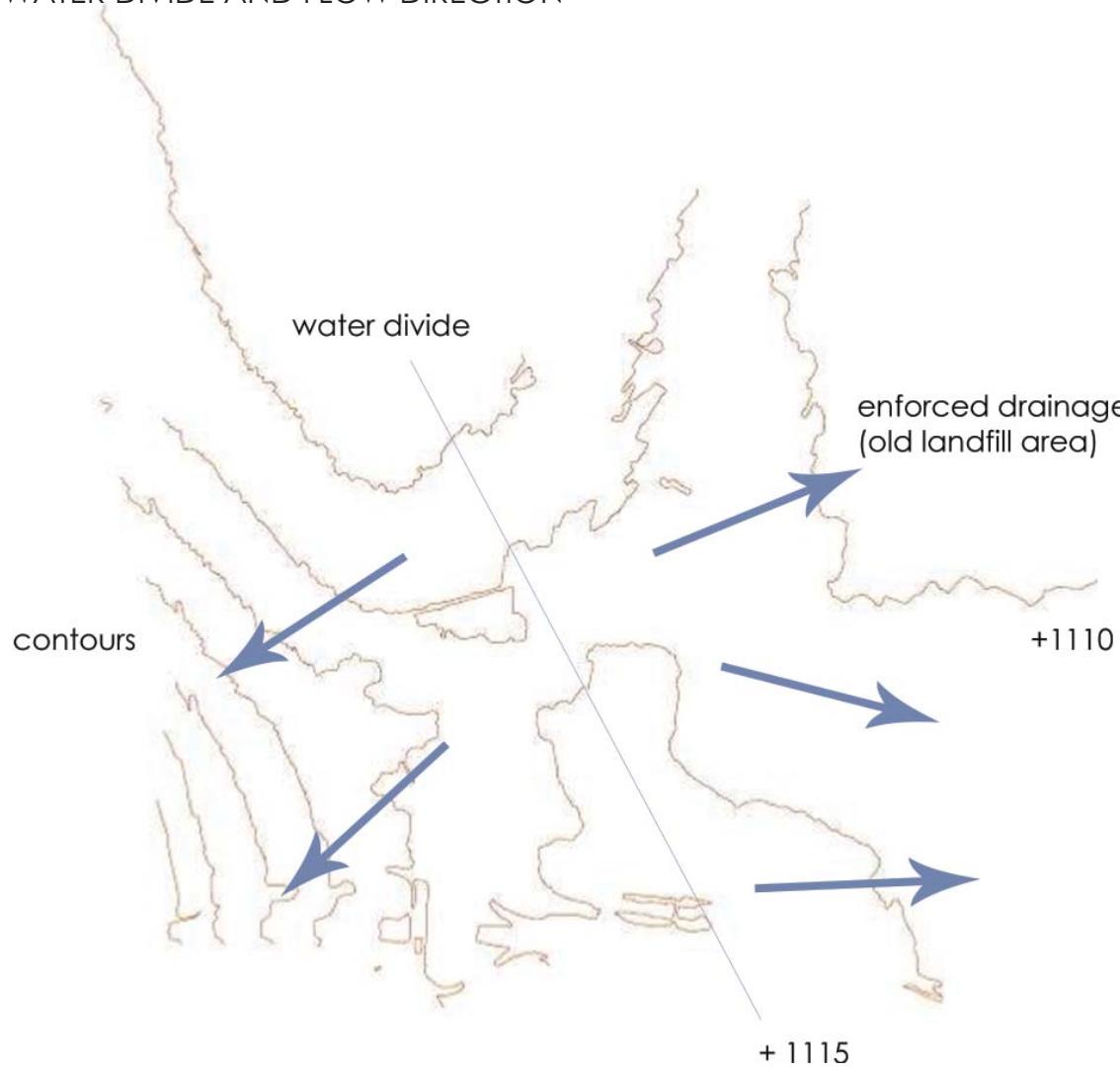


WATER DIVIDE AND FLOW DIRECTION



WATER CYCLE

The energy for the water cycle comes from the sun. It is also that what causes the water from the surface of the oceans and continents to evaporate.

The steam in the clouds can be transported to mainland/ continent and returns back to the soil as rain and/ or other kinds of precipitation.

Rainwater percolates into the soil and increases its moisture.

One part of the water is held immediately beneath the surface and a further part evaporates from the soil or is absorbed by plants.

The water, which is percolated into lower layers and stored as groundwater, finally collects in rivers and oceans. From there the water vaporises into the atmosphere again and the cycle is closed.

The groundwater

The catchment area of the river Riacho Fundo has two kinds of groundwater reservations. The reservation, which holds back the water in the soil and the

reservation, which holds back the water in clefts and cracks of the rocks lying under the soil.

The first one hinges on rainfalls. If the ground is completely filled, the water will run to valleys and leakage on hillsides. Watercourses high on quality come into existence.

However the groundwater is endangered by the possibility of pollution coming from livestock farming, using chemical fertilizer in agriculture, incorrect waste water treatment etc.

The catchment area of the rivers Guará and Vincente Pires is a free reservation with a large dispersal. Humans get their water from wells, which have a depth of 15 metres. This water is not for human use because of the pollution.

The second kind of reservation also contributes to the existence of watercourses. These reservations are supplied with water from the other reservation and sometimes have a depth of 150 metres. The pollution is not so high as the first one.



WATER CATCHMENT AREA FOR THE PARANOÁ LAKE

