



STINAPA INFORMATION

SEA LEVEL

The Climate-Change movie by Al Gore (An Inconvenient Truth) has put the possible effects of global warming squarely in the spotlight. One of the most important consequences of global warming is the rise of the global sea levels. For low-lying areas such as you find in the Netherlands, this means that the dikes must be reinforced and/or heightened. Flat islands which hardly rise above the sea level, like the Maldives in the Indian Ocean, will eventually disappear under water. If no measures are taken to protect the shoreline, the same will happen with the low-lying part of Bonaire in the south. Already the high waves of a tropical depression submerge the roads there. The sea gives, and the sea takes. For the higher parts of the island the rise of the sea level is no problem, but it is interesting to know that millions of years ago the sea level was 15 meters higher than it is now. Ice ages, during which the majority of water masses on earth were frozen, alternated with hot periods. When it got warmer the ice melted and the sea level rose. A large part of Bonaire was under water back then. But I truly realized what that higher sea level means when the guide that led me around a cave pointed out some brain coral and fish skeletons in the walls of the cave. So fish used to swim there!?! Bonaire has about 200 caves that are part of an underground network of corridors. Those caves remind us of the oldest geological phase in our history. Million of years ago Bonaire was a rock that consisted of igneous stone (formed by a volcano). Coral then started to grow on this rock, and the calcium skeleton these corals excreted formed thick layers of limestone over millions of years. When the sea level dropped again, rain started eroding the now dry parts of the island. Because carbon-dioxide was suspended in the rainwater, it became acidic, slowly dissolving the softer parts of the limestone. Small dents in the surface eventually became cracks, causing the rainwater now to run down faster and forming underground. The 'riverbeds' kept eroding by the force of the water, and the roofs kept dissolving. That's how corridors and caves were formed. When you visit a cave you will notice the mysterious protrusions growing from both roof and bottom. These were formed by calcium carbonate that stayed behind from water seeping through the roof of the cave. As long as water will keep seeping through in the caves, these protrusions which we call stalactites and stalagmites will keep growing.

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NOS TA BIBA DI NATURALESA



Traha huntu na un desaroyo duradero pa Boneiru