Hydraulic erosion control and drainage



Flood prevention and road safety



Deviation of a watercourse causing flood near a highway

The challenge

- The rainwater is concentrated in a watercourse located near a highway down-stream of a mountain, suddenly rising the water level from 0 to 3 meters.
- This high flow is caused by the infiltration and the water erosion under the road parallel to the watercourse.
- The waste is accumulated in the watercourse and thus frequently blocking it up.
- Seasonally, heavy rains inundate all neighboring terrains.

About GeoGlobe® Europe

Being aware of the geological, ecological, economic and human challenges of our century, GeoGlobe® Europe company designs and manufactures geosynthetic systems for soil stabilization and erosion control and puts its know-how and its experience in service of the Earth – Stabilization.

Being dynamic, GeoGlobe® Europe consists of a team of specialists with a permanent and consistent in the world of geo... or in the geosynthetic world.

GeoGlobe® Europe continuously invests in research and development of technologies whose effectiveness is proven in long terms.

Based on many years of experience in studying and realization of geosynthetic solutions applied in the infrastructure projects and terrain stabilization, we focus on the feasibility and durability of the solutions.

Today GeoGlobe® Europe takes care to offer customized solutions harmoniously combining the technical performance at the level of civil engineering with the human pledge including the socioeconomic development and the ecological engineering in respect to the environment for a more stable future.



Hydraulic erosion and drainage flood prevention and



The Solution

To create a reinforced channel of GeoGlobe® and change the channel- bed of the watercourse in order to prevent the risks of flood even in case of heavy rains.

The old method

In view of challenge to reveal, all conventional methods have been unsuccessful:

The gabions cannot avoid the accumulation of waste and do not allow the cleaning of the channelbed of the watercourse in any season. The concrete plates are cracked even broken due to the high level of the water table and the hydrostatic pressure.



In order to solve the flood problems the channel- bed of the watercourse can be deverted and reinforced with the help of GeoGlobe® filled with concrete with brown pigment. Planting trees and bushes to harmonize the channel with the surrounding landscape in the heart of a natural park.



The technology - simple, fast, effective and economical

After cleaning and shaping the channel-bed of the watercourse GeoGlobe® is expanded and anchored to the width over a nonwoven geotextile. After that the cells are filled with concrete with brown pigment reserving some cells for plantations.

The result

The watercourse flows regularly for over 10 years, collects the run-off from upstream to go into the sea.

Due to the vegetation that covered the banks, it is almost impossible to discern the concrete.

After the reinforcement of the bed of the watercourse, it is possible to pass a tractor to clean it easily. Because of the construction of the channel with a confinement system, there are no more floods on the neighboring terrains and the road is not damaged anymore by the erosion caused by the water infiltration.



