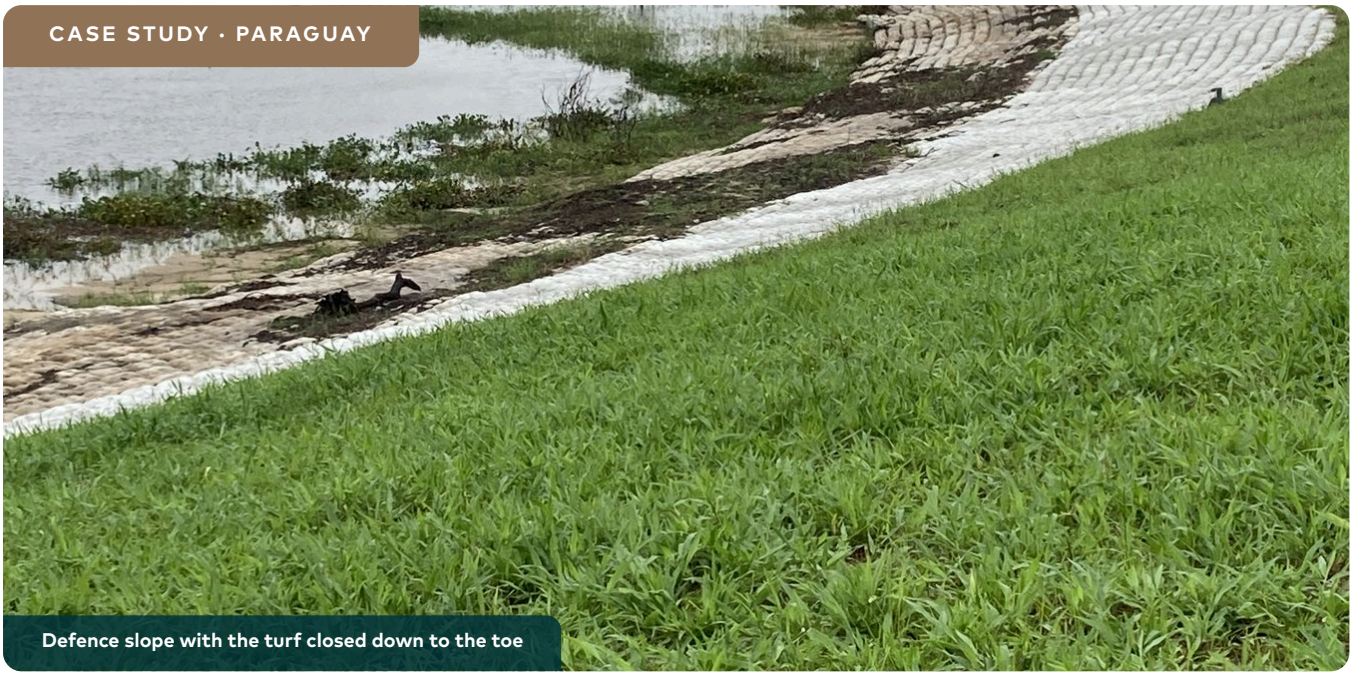
04 PILAR COASTAL DEFENCE

CHANNEL AND SLOPE REVEGETATION WITH MULCHES AND MATS

CASE STUDY · PARAGUAY



Defence slope with the turf closed down to the toe

15 km
OF DEFENCE ON THE PARAGUAY RIVER

14 km
OF REVEGETATED DIVERSION CHANNEL

750,000
M² OF REINFORCED REVEGETATION IN THE DIVERSION CHANNEL

The challenge: the Pilar coastal defence — 15 km on the Paraguay River, with a 14 km diversion channel, drainage channels and gates — needed its embankments and earth channels to withstand rain and water flow without eroding.

The solution: hydraulic mulches to establish vegetation on embankments and banks, and **turf reinforcement mats** in the channels, where the reinforced grass withstands flood flows: **750,000 m²** of reinforced revegetation in the diversion channel. Vegetation as an engineered lining.

> **One party responsible:** in Pilar, Ece carried out the complete revegetation — hydroseeding and turf reinforcement — along the 14 km of the channel, with the same technical team.



Biodegradable erosion control blanket: it protects soil and seed until the grass closes over



Defence slope in full revegetation: the grass spreads over the treated soil

PROJECT FILE

Project	Pilar Coastal Defence
Location	Pilar, Ñeembucú
System	Hydraulic mulches + turf reinforcement mats
Scope	Diversion channel (750,000 m²), drains and embankments