

Environmental Impact Assessment (EIA-report) for a land reclamation at Barcadera, Aruba

Aruba, 2018

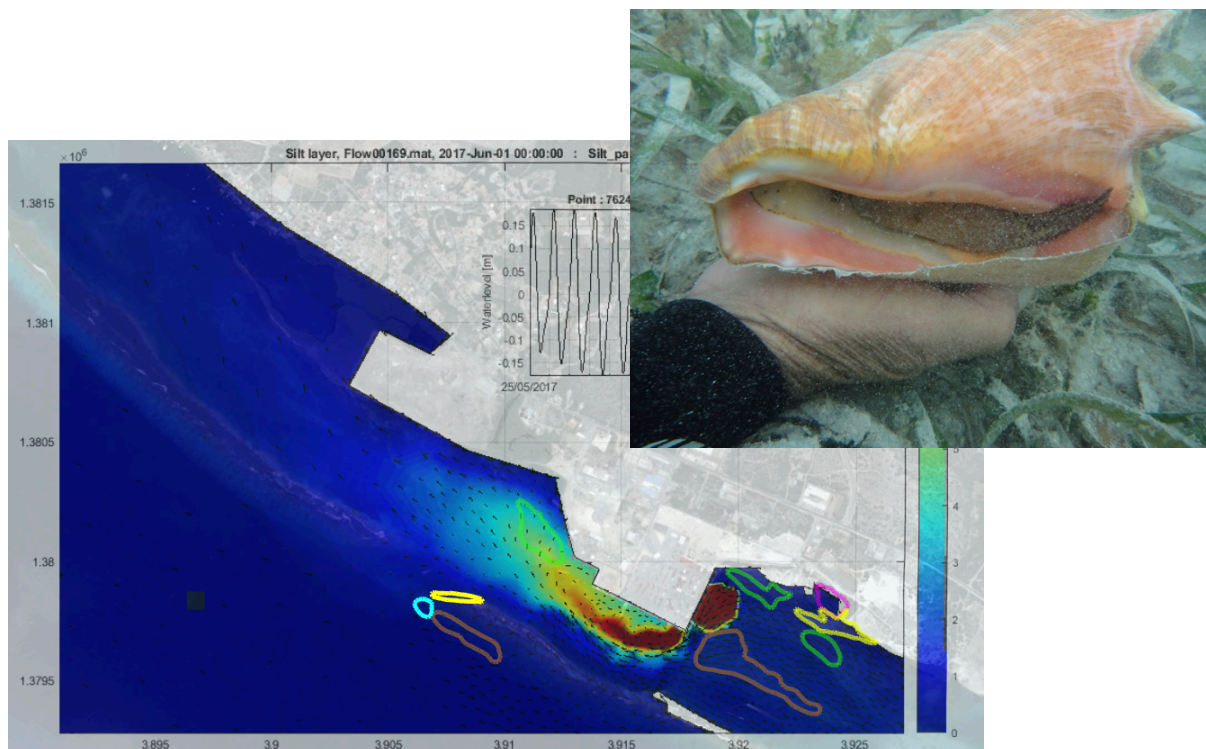
Client info:

Name: Aruba Ports Authority (APA)

Sector: Transportation

Location: Aruba

APA is a government owned company responsible for the operation of all Aruban harbors.



Rationale: The maintenance dredging of the Oranjestad harbour of Aruba produces 700.000 m³ of sediment. APA plans to use the sediments for a land reclamation project east of Barcadera (current container harbor). The new area will be used as a new industrial area.

Approach: After analysis of the sediments (particle sizes and chemical analyses) the sediment was found to be uncontaminated and suitable for reuse. With the use of a finite element hydraulic model (Finel3D) EcoVision modelled the dispersion of suspended solids in the environment. The results were used to assess possible damage to the adjacent sea grass beds and coral reefs.

Outcome: APA agreed to amend the physical footprint of the project to minimize direct damage to an important sea grass bed in the shallow waters of the lagoon and to minimize damage to an adjacent mangrove strip.