

Paramaribo-Wanica Online Viewer Tool

Gregory Verutes

February, 2016

Welcome Page

The screenshot shows a web browser window with the URL geointerest.frih.org/Suriname/. The main content is a map of Paramaribo, Suriname, with a popup window titled "PARAMARIBO-WANICA, SURINAME" and "Assessment of peri-urban coastal protection options". The popup contains text about the assessment and logos for WWF, World Resources Institute, and the Natural Capital Project. To the right of the map is a sidebar with a photo of a Hindu crematorium and a list of "COASTAL PROTECTION OPTIONS" including WEST, MIDDLE, and EAST. Below the sidebar is a section for "ASSESSMENT STEPS".

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- OpenStreetMap
- Streets & Hydro
- Topography
- Imagery
- Mangroves
- Study area
- Land use / cover
- Engineered options

3 km

2 mi

Paramaribo

Stoker

Onverwacht

MAP ZOOM (+/-)

PARAMARIBO-WANICA, SURINAME

Assessment of peri-urban coastal protection options

Faced with growing intensity of human activities and climate change, coastal inhabitants seek a better understanding of how modifications to the biological and physical environment can affect their exposure to storm surge and flooding.

WWF Guianas, the Mangrove Forum and partners are compiling relevant information on the importance of mangroves and other coastal protection options, including sediment trapping units. These options may include building a permanent or semi-permanent dyke, designation of no-build or no-clearance areas for mangroves, or some combination (e.g., mixture of soft/engineered solutions). It may also include the option to relocate coastal populations away from flood prone areas.

WWF

WORLD RESOURCES INSTITUTE

natural capital PROJECT

Pre

Next

Hindu crematorium

1 2 3 4 5 6 7 8 9 10

COASTAL PROTECTION OPTIONS

WEST

In *Weg naar Zee*, both engineered and nature-based options are being considered. Engineered options include a **kieldam** (earthen dyke) and **sediment trapping units** (STUs). Findings indicate that the proposed dyke will not protect the Hindu Temple. Mangrove enhancement is a more cost-effective solution as it generates a higher net-present value (US\$ 290M) for a period of 25 years, in comparison to the kieldam protection scenario (US\$ 104M).

MIDDLE

EAST

ASSESSMENT STEPS

Viewer by: Gregg Venetis | © Mapbox © OpenStreetMap Improve this map

Side Panel



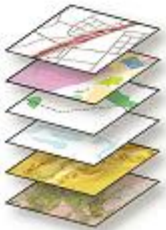
COASTAL PROTECTION OPTIONS

- ▶ WEST
- ▶ MIDDLE
- ▼ EAST

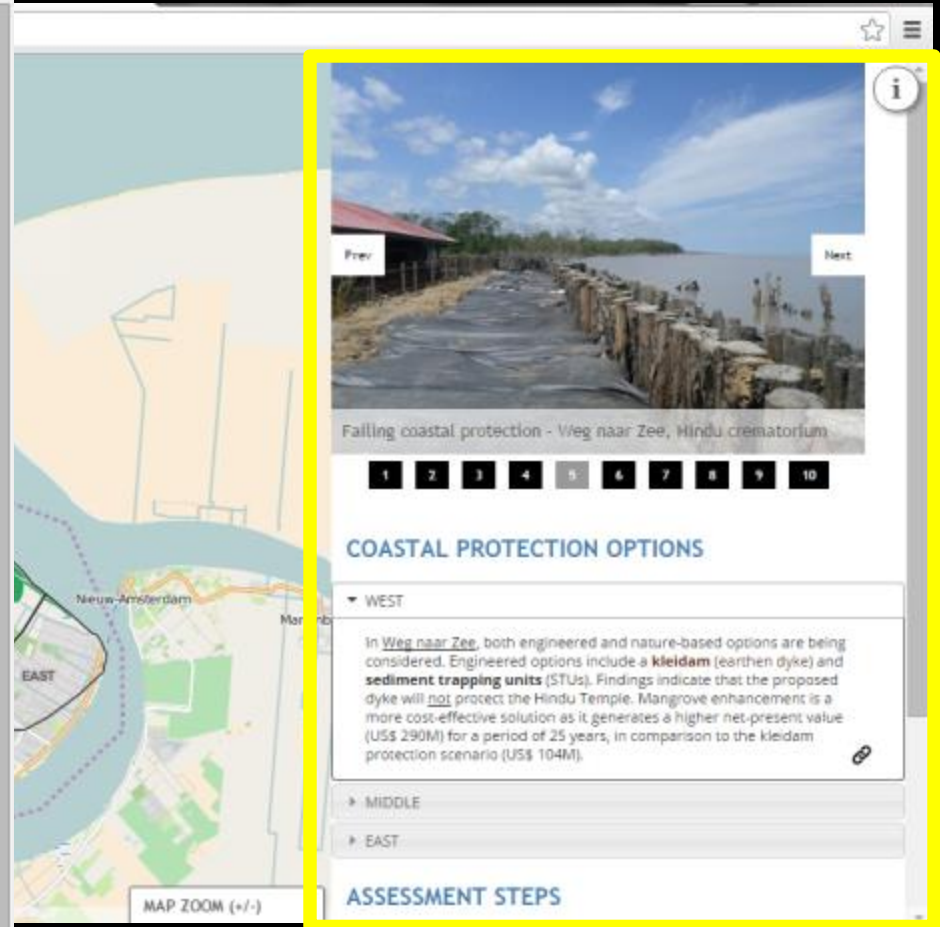
Model results suggest that the construction of a **riverdijkje** (sea wall) is the appropriate option to protect the coastal area along the Suriname river, northeast of Paramaribo's Centrum ressort. Additional flooding might occur from the land-side during storms due to inadequate or clogged drainage. Due to the high commercial value of property in this area, the total avoided damages due to the presence of a riverdijkje is estimated to be between 0.87 and 1.2 billion US\$.

ASSESSMENT STEPS

- Data
- Options
- Shoreline Modeling
- Valuation
- Outreach



Data indicates the location of current environments and human activities and serve as a foundation for discussions of future plans. It also serves as inputs to shoreline model and visually depicts alternative options. Data include biophysical information such as elevation and coastline shape, maps of human activities, the distribution of coastal habitats, and socioeconomic data such as property values.



Map Layers Palette

← → ↻ 🏠 geointerest.frih.org/Suriname/

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- OpenStreetMap
- Streets & Hydro
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- Study area
- Land use / cover
- Engineered options

3 km

2 mi

Paramaribo

WEST

MIDDLE

EAST

Brid Village

Greenvew Lake

Nieuw-Amsterdam

Marien

Paramaribo

MAP ZOOM (+/-)

Mapbox
Viewer by: Gregg Verutes © Mapbox © OpenStreetMap Improve this map

Map Window

geointerest.frih.org/Suriname/#west

OpenStreetMap
Streets & Hydro
Topography
Imagery

Mangroves
 Study area
 Land use / cover
 Engineered options

500 m
3000 ft

Paramaribo

WEST

MAP ZOOM (+/-)

WEST
MIDDLE
EAST
Greater Paramaribo

Pilot location: Four sediment trapping units (STUs) to be implemented

Falling coastal protection - Weg naar Zee, Hindu crematorium

1 2 3 4 5 6 7 8 9 10

COASTAL PROTECTION OPTIONS

▶ WEST
▶ MIDDLE
▼ EAST

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